

CLAIMS:

1. A storage device for storing data on a recording medium (40) by using allocation classes for optimizing storage and retrieval of said data based on properties of their content, said device comprising:
 - a) discriminating means (320) for discriminating a type of said data based on a predetermined property of said data;
 - 5 b) tracking means (340) for tracking a usage pattern for a discriminated type of said data; and
 - c) class selection means (330) for selecting an allocation class used for storing said discriminated type of data, based on said usage pattern.
- 10 2. A device according to claim 1, wherein said discriminating means (320) is arranged to discriminate said type of said data based on at least one of a file extension, a kind of data source, and a file size of said data.
- 15 3. A device according to claim 1 or 2, wherein said recording medium is an optical disc (40).
4. A device according to claim 1 or 2, wherein said class selection means (330) is arranged to predict said usage pattern for a predetermined file extension.
- 20 5. A device according to claim 1 or 2, wherein said storage device comprises an optical disc recording device (30).
6. A device according to claim 1, 2 or 4, wherein said class selection means (330)
25 is arranged to select a best effort allocation class for files with a first file extension indicating a still picture, a low rate stream allocation class for files with a second file extension indicating an audio file, and a high rate stream allocation class for a third file extension indicating a video file.

7. A device according to any one of the preceding claims, further comprising buffer means (310) for caching said data.
8. A device according to claim 7, wherein said class selection means (330) is
5 arranged to assume a video file if said buffer means (310) indicates an overflow before the end of file has been stored.
9. A device according to claim 1, 2, 4 or 6, wherein said class selection means (330) is arranged to select a volatile file allocation class if said usage pattern indicates a
10 writing frequency greater or equal to a predetermined threshold.
10. A method of selecting an allocation class used for storing data on a recording medium (40), said method comprising the steps of:
- a) discriminating a type of data based on a predetermined property of said data;
 - 15 b) tracking a usage pattern for a discriminated type of said data; and
 - c) selecting said allocation class based on said usage pattern.
11. A method according to claim 10, wherein said predetermined property comprises at least one of a file extension, a kind of data source, and a file size.
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12. A method according to claim 10 or 11, further comprising the steps of predicting said usage pattern for a predetermined file extension.
13. A method according to any one of claims 10 to 12, wherein said allocation
25 class is selected from a set of allocation classes comprising a best effort allocation class, a high rate stream allocation class, a low rate stream allocation class, a volatile file allocation class, and a non-volatile file allocation class.